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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

Complete if Known				
Application Number	10/705,174			
Filing Date	November 11, 2003			
First Named Inventor	Mitchell, et al.			
Art Unit	1723			
Examiner Name	Yoon-Young Kim			
Attorney Docket Number	8681PCP2			

U. S. PATENT DOCUMENTS						
Examiner Initiats*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
JK		US-5,521,008	05/28/1996	Lieberman et al.		
		US-6,827,854	12/07/2004	Mitchell et al.		
		US-6,241,893	06/05/2001	Levy		
		US-5,772,896	06/30/1998	Denkewicz et al.		
		US-4,396,512	08/02/1983	Beauman et al.		
		US-6,630,016	10/07/2003	Koslow, Evan E.		
		US-5,376,279	12/27/1994	Judd et al.		
		US-4,654,075	03/31/1987	Cipollini, Ned E.		
		US-5,527,451	06/18/1996	Hembree et al.		
		US-5,536,394	07/16/1996	Lund et al.		
		US-5,709,794	01/20/1998	Emmons et al.		
		US-5,882,507	03/16/1999	Tanner et al.		
		US-6,103,114	08/15/2000	Tanner et al.		
		US-4,969,996	11/13/1990	Hankammer		
		US-5,431,813	07/11/1995	Daniels		
		US-6,214,224	04/10/2001	Farley		
		US-5,957,034	09/28/1999	Sham et al.		
		US-6,145,670	11/14/2000	Risser		
		US-6,120,685	09/19/2000	Carlson et al.		
		US-6,241,899	06/05/2001	Ramos		
		US-5,834,114	11/10/1998	Economy et al.		
		US-5,776,385	07/07/1998	Gadkaree et al.		
		US-5,487,917	01/30/1996	Gadkaree		
		US-5,702,498	12/30/1997	Huang		
		US-4,448,695	05/15/1984	Gordon, Jr. et al.	<u> </u>	
		US-5,773,143	06/30/1998	Vermillion et al.		
		US-4,283,283	08/11/1981	Zimmerman		
		US-4,552,863	11/12/1985	Fujimori		
]	US-3,950,267	04/13/1976	Arakawa et al.		
		US-6,057,262		Derbyshire et al.		
		US-5,204,310	04/20/1993	Tolles et al.		
		US-5,670,124		Itoga et al.		
_		US-4,081,370	}	Schmitt, Jr. et al.		
		US-5,466,378		Dussert et al.		
		US-4,822,765	04/18/1989	Nishimura		
		US-4,670,482		Dilling		
		US-6,565,749		Hou et al.		
-		US-2002/0148785		Mitchell et al.		
الملحا		US-2002/0150686	10/17/2002	Mitchell et al.		
_ V _		US-2002/0074294		Tremblay et al.		
JК		US-4,978,650	12/18/1990	Coughlin et al.		

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO **Application Number** 10/705,174 Filing Date November 11, 2003 INFORMATION DISCLOSURE First Named Inventor Mitchell, et al. STATEMENT BY APPLICANT Art Unit 1723 (Use as many sheets as necessary) **Examiner Name** Yoon-Young Kim

Attorney Docket Number 8681RCR2 Sheet **U. S. PATENT DOCUMENTS** Cite No. **Document Number** Publication Date Name of Patentee or Pages, Columns, Lines, Where Initials* MM-DD-YYYY Applicant of Cited Document Relevant Passages or Relevant Number-Kind Code^{2 (N known)} Figures Appear JK US-6,660,168 12/09/2003 Tremblay et al. US-6,565,749 05/20/2003 Hou et al. US-2003/0038084 02/27/2003 Mitchell et al. US-2003/0096703 04/22/2003 Mitchell et al. US-2003/0106851 06/12/2003 Tremblay et al. US-2003/0136728 07/24/2003 Jagtoyen et al. US-2004/0040906 03/04/2004 Jagtoyen et al. US-2002/0172637 11/21/2002 Chesneau et al. US-S/N 09/574,456 JK Tremblay et al

			EIGN PATENT DOC				
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³ (if known)	Publication Date MM-DD-YYYY		Patentee or Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T°
JK	1	RU 2 064 429	07/27/1996	Vasil'evich	et ai		+-
Ī	1	RU 2 034 789	05/10/1995	Aleksandro			+
		RU 2 070 438	12/20/1996	Pimenov et		· · · · · · · · · · · · · · · · · · ·	+
		EP 1 419 109	12/21/2005	Mitchell et a	al		\dagger
		WO 94/10091	03/11/1994	Bio Sci Pro	d Ent.		T
		WO 99/10076	03/04/1999	Hughes			1
		WO 02/098536	12/12/2002	Mitchell et a	al.		
		WO 02/083266	10/24/2002	Mitchell et a	al.		
		EP 367389	05/09/1990	Dilling et al.			Τ
		FR 2331 515	06/10/1977	Seiler et al.			Γ
		FR 2743 285	07/11/1997	Moulinex			Τ
		GB 1,163,426	09/04/1969	Kata Mfg. a	nd Filtering		
	<u></u>	JP 2000281445	10/10/2000	Tokio et al.			Π
		JP 05049921	03/02/1993	Tokai Carbo	on KK		Г
		SU 1717538	03/07/1992	Pokonova e	et al.		
L		DE 93 12 279	10/14/1993	ETC Engineering			
		WO 02/100509	12/19/2002	Cannon et al.			
	<u>L</u>	WO 02/068324	09/06/2002				
<u>_v</u>		WO 03/068686	08/21/2003	Mitchell et a	al.		
JK	<u>Ļ</u>	EP 0 490 317	06/17/1992	Abe et al.			
Examiner Signature		/John Kim/			Date Considered	11/15/2006	

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Substitute for form 1449/PTO .				Complete If Known		
				Application Number	10/705,174	
			CLOSURE	Filing Date	November 11, 2003	
STATEMENT BY APPLICANT		First Named Inventor	Mitchell et al.			
(Use as many sheets as necessary)				Art Unit	1723	
(Use as many sneets as necessary)			cessary)	Examiner Name	Yoon Young Kim	
Sheet	3	of	3	Attorney Docket Number	8681RCR2	

		NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of					
JK		DIMITRIS IOANNIS COLLIAS, Declaration under 37 CFR §1.132, 04/01/2004.				
		NEWCOMBE, G., ET AL., "Granular activated Carbon: importance of surface properties in the adsorption of naturally occurring organics", Colloids and Surfaces A: Physiochemical and Engineering Aspects, 1993, 65-71, Vol. 78.				
		GREGG, S.J., ET AL., "Mesoporous solids: the Type IV isotherm", Adsorption, Surface Area and Porosity, 1982, 137-143, 2nd Edition, Academic Press, Inc.				
		REPORT OF TASK FORCE, "Guide Standard and Protocol for Testing Microbiological Water Purifiers", <u>United States Environmental Protection Agency</u> , (submitted April, 1986), revised April, 1987, 1-39.				
		WESTVACO PRODUCTS ON-LINE, "Wood-based Activated Carbons", (2 pgs), downloaded 7/01.				
		ABOTSI, GODRIED, "Interfacial Properties of Coal: A Guide to Catalyst Loading and Dispersion for Coal Conversion", Energia, Vol. 7, No. 5, 3-5, (1996)				
		MORENO-CASTILLA, C., ET AL., "The Creation of Acid Carbon Surfaces by Treatment with (NH ₄) ₂ S ₂ O ₈ ", <u>Carbon</u> , Vol. 35, No. 10-11, 1619-1626 (1997).				
		FRANZ, M., ET AL., "Effect of Chemical Surface Heterogeneity on the Adsorption Mechanism of Dissolved Aromatics on Activated Carbon", Carbon, Vol. 28, No. 13, 1807-1819, (2000).				
V		BABIC, B.M., ET AL., "Point of Zero Charge and Intrinsic Equilibrium Constants of Activated Carbon Cloth", Carbon, Vol. 37, No. 3, 477-481, (February 22, 1999).				
JK		MENENDEZ, J.A., ET AL., "On the Difference Between the Isoelectric Point and the Point of Zero Charge of Carbons", <u>Carbon</u> , Vol. 33, No. 11, 1655-1657, (1995).				

Examiner	/John Kim/	Date	22/25/222
Signature	/ OOM KIM/	Considered	11/15/2006
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